



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,825	09/12/2003	Thomas Herbert Peterson	134687NV (MHM 15085US01)	7037
23446 7590 11/23/2007 MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661			EXAMINER MEHTA, PARIKHA SOLANKI	
			ART UNIT 3737	PAPER NUMBER
			MAIL DATE 11/23/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/660,825

Applicant(s)

PETERSON, THOMAS HERBERT

Examiner

Parikha S. Mehta

Art Unit

3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Response to Arguments***

1. Applicant's arguments filed 6 September 2007 have been fully considered but they are not persuasive. The currently amended claim language fails to distinguish the instantly claimed invention over the Ligtenberg (US Patent No. 4,722,348) reference. Regarding the new recitation of the flexible engaging member having an operative tip, Examiner respectfully draws Applicant's attention to the definition of the word tip, as set forth by Merriam Webster (<http://www.m-w.com>):

Tip: a small piece or part serving as an end, cap or point

Since the flexible member of Ligtenberg ('348) as shown in Fig. 2 closes an opening along the length of the device, it can be broadly interpreted to constitute a cap, and, consequently, a tip. Furthermore, Applicant's added recitation of "in order to provide information regarding a location of said operative tip" is ineffective for at least two reasons, the first of which is that the added recitation makes reference to the intended use of the structure, which is not given patentable weight. Furthermore, even if one of reasonable skill were to consider Applicant's intended use recitation as a structural limitation, one could certainly argue that by sensing the external pressure with the reference transducer, one can infer information regarding the location of the device. For instance, it is known in the art that the pressure of flowing blood varies predictably within the cardiovascular anatomy, and therefore the sensed pressure can indeed provide information regarding the catheter's location within the patient.

As Applicant's amendments are ineffective to sufficiently distinguish over the Ligtenberg ('348) reference, the previous rejection is maintained and reiterated herein. Should Applicant wish to continue prosecution of this application, Examiner encourages Applicant to include with any future claim submissions more detailed recitations of the structure and steps of the claimed inventions in order to overcome the presently cited prior art.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 3737

3. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Ligtenberg et al (US Patent No. 4,722,348), hereinafter Ligtenberg ('348).

Ligtenberg ('348) discloses a catheter comprising a support member operatively connected to a flexible engaging member, and Wheatstone bridge circuit affixed to the engaging member, wherein the bridge constitutes a strain gauge that detects deflection of the engaging member as claimed in the instant application (Figs. 1 & 2, col. 1 lines 65-68, col. 2 lines 20-24, col. 3 lines 26-31). The Wheatstone bridge disclosed in the reference also constitutes an electrical circuit as recited in claim 3 of the instant application, and it includes several resistors, which comprise the additional strain gauge recited in claim 5 of the instant application. Ligtenberg ('348) shows that the support member is proximate the strain gauge as recited in claim 6 of the instant application (Fig. 2).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ligtenberg ('348) in view of Ferre (5,803,809), previously made of record by Applicant, hereinafter Ferre ('809).

Ligtenberg ('348) discloses a medical instrument having a deflection tracking system as previously discussed for claims 1-6. Ligtenberg ('348) lacks at least one of an electromagnetic, optical, inertial position and ultrasound system configured to track said medical instrument. Ferre ('809) teaches a system for tracking a medical instrument using electromagnetic or ultrasonic means (col. 4 lines 25-29). The system and method of Ferre ('809) are taught to include means and steps for displaying the position of the medical instrument within the operating area of the patient. It would have been obvious to one of ordinary skill in the art at the time of invention to use the medical instrument of Ligtenberg ('348) with the position tracking system of Ferre ('809) in order to allow a physician to accurately localize the medical instrument during operation, as is well known in the art. Modifying the Ligtenberg ('348) invention to include a position tracking system constitutes an obvious improvement to the reference

Art Unit: 3737

system and method, the improvement being part of the ordinary capabilities of a person having reasonable skill in the art at the time of invention.

Conclusion


6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Parikha S. Mehta whose telephone number is 571.272.3248. The examiner can normally be reached on M-F, 8 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571.272.4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Parikha S. Mehta

Application/Control Number: 10/660,825

Page 5

Art Unit: 3737

Examiner – Art Unit 3737

Brian Caster
Brian Caster
SPB 3737